

National Research Council Postdoctoral Research Associateships

At the Ceramics Division, Materials Science and Engineering Laboratories of the National Institute of Standards and Technology (NIST)

NIST is one of the premier research laboratories in the world. Ceramics research programs include experimental and theoretical studies of:

Nanometrology:

- Nanomechanics, nanotribology, mechanical metrology for small-scale structures
- Thermochemical metrology of interfacial interactions
- Chemistry and structure of nanomaterials, Nanoparticles in cancer research

Materials for Electronics:

- Advanced materials for Si CMOS (e.g. high-k gate dielectrics, strained silicon)
- Advanced materials for energy applications (e.g., thermoelectrics, hydrogen-storage materials)
- Combinatorial materials science, computational materials science
- Multifunctional electronic materials, optoelectronic materials

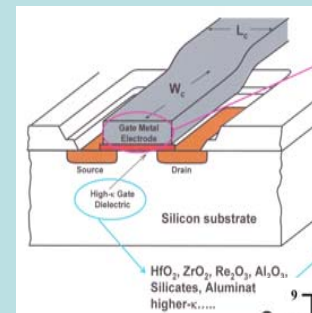
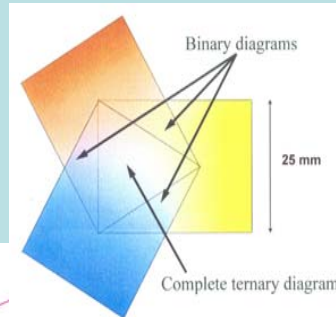
Cross-cutting Metrology, Standards and Data Needs:

- X-ray diffraction metrology and standards
- Synchrotron-based spectroscopy, diffraction and imaging methods
- Phase equilibria, crystal chemistry, and crystallographic data
- Materials data evaluation and interoperability of materials databases

Applications are due August 1, 2006, with decisions in Mid-September and starting dates after December 2006. Eligibility is limited to U.S. Citizens. Starting salary is \$55.7K.

For program details, see <http://www4.nationalacademies.org/pga/rap.nsf>

For information about specific projects or other research in the Ceramics Division see our annual report at <ftp://www.ceramics.nist.gov/ann2004.pdf> or contact Debra Kaiser, Division Chief, 301-975-6119, debra.kaiser@nist.gov



Thermal and electrical stability of the interfaces

